

# Memo

**To:** McHenry County Physicians  
**From:** Mary Lou Ludicky, RN, MPH, Communicable Disease Coordinator  
Susan Karras, RN, BSN, Communicable Disease Investigator  
**Date:** 11/01/2012  
**Re:** Bordetella Pertussis Cases

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The McHenry County Department of Health (MCDH) Communicable Disease (CD) Program would like to update you on the status of pertussis cases in McHenry County. Currently, for the year 2012 we have 277 reported cases of pertussis. In 2011, there was a peak in cases with an onset on October 31, 2011 and the week following. In anticipation of the same peak this year, we ask that you review the following information on Pertussis diagnosis and other prevention guidelines.

➤ **Consider:**

- Pertussis **diagnosis on any child, youth or adult** with an acute cough illness characterized by: dry irritating cough which worsens at night, or cough with paroxysms, whoop, or post-tussive/gagging and/or vomiting. Especially cough illness lasting more than 2 weeks. **Start treatment; do not wait for laboratory results.**

➤ **Diagnosis:**

- The diagnosis of pertussis is based on a characteristic clinical history (cough for more than 2 weeks with whoop, paroxysms, or post-tussive vomiting) as well as a variety of laboratory tests (culture, polymerase chain reaction [PCR], direct fluorescent antibody [DFA] and serology).
- Culture is considered the gold standard laboratory test and is the most specific of the laboratory tests for pertussis. Since adolescents and adults have often been coughing for several weeks before they seek medical attention, it is **often too late for culture to be useful.**
- Because of the increased sensitivity and faster reporting of results by PCR, many laboratories are now using this method exclusively. Like

culture, PCR is also affected by specimen collection and duration of symptoms. **Appropriate nasopharyngeal collection technique is essential. An inappropriately obtained nasopharyngeal swab will likely be negative by both culture and PCR.**

- **Treatment (Azithromycin, erythromycin, or clarithromycin):**
  - Based on the clinical limitations of PCR testing, **if a patient has clinical symptoms of pertussis and has an epidemiological link to a pertussis case they are considered a case of pertussis and should be treated.**
  - All suspected cases should be treated; **do not wait for laboratory results.**
  - **Family and/or household members of a positive PCR for pertussis case should be started on chemoprophylaxis despite immunization status.**
- **Exclusion From Work, School, Day Care, Activities**
  - **Symptomatic persons should be excluded from child care, work, school, or activities for the first 5 days of a full course of antimicrobial treatment.**
  - **Symptomatic persons who do not take antimicrobial treatment should be excluded from child care or school for 21 days from onset of cough.**
  - Asymptomatic contacts who elect not to take antibiotics, or persons who are not up-to-date with their pertussis immunizations (especially infants who have not had 3 doses of a pertussis-containing vaccine) may be considered for exclusion from child care or school for 21 days after their last exposure. This preventive measure may help protect children from getting pertussis and is especially important for infants in whom pertussis can be severe
  - For more information visit <http://www.cdc.gov/mmwr/pdf/rr/rr5414.pdf>
- **Education of Patients**
  - **Patients, especially students, who are symptomatic and receiving treatment should be instructed to stay home from school, work including babysitting, and other activities for five full days until treatment is completed.**
  - **Contacts receiving chemoprophylaxis (asymptomatic) do not need to stay home from school, work including babysitting, and other activities for five days.**

➤ **Additional Resources:**

- <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/pert.pdf> (CDC Pink Book Chapter on Pertussis)
- <http://www.cdc.gov/vaccines/pubs/pertussis-guide/guide.htm> (CDC Pertussis Outbreak Control Guide)
- <http://www.cdc.gov/pertussis/clinical/diagnostic-testing/diagnosis-confirmation.html> (laboratory testing information)

**It is important at this time to report any Suspect, Probable, or Confirmed cases of Pertussis to the McHenry County Department of Health Communicable Disease Program by phone (815-334-4500) or by faxing the attached “Pertussis Case Report Form” which also can be found at**

**<http://www.co.mchenry.il.us/departments/health/Pages/PHSprovider.aspx>**

**Please feel free to call the Communicable Disease Program at 815-334-4500 with any questions or concerns.**